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AMATEUR RADIO

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EDITORIAL



THE POWER OF A MEETING

Such are the ambiguities of English grammar that many words can have a multiplicity of meanings. The word "meeting" is a typical example, and yet, in a strange way, the dictionary explanations of this quite common word can all mean the same thing when applied to the meetings of our Institute.

A meeting of the Institute gives that great opportunity to "come face to face with" other people whom we have probably heard on the air time and time again; the chance to "reach out and touch or unite" with our fellow Amateurs; to "come together," "to assemble," "to be united" with people who have the same interests at heart; "to meet," sometimes for the first time, those of our fraternity we have always wanted to meet.

But in an Institute such as ours, this is not the only benefit we can derive from a "meeting"; it also affords a powerful liaison between the Society and its membership; it gives the membership the opportunity to let the Society know its individual problems, the opportunity to discuss individual problems between each other. It gives the Society the opportunity to do something about these problems.

A meeting does more than all the letter-writing in the world could do. It gives the necessary power to the membership and the Institute to discuss and resolve major problems that confront Amateur Radio.

The W.I.A. has major problems facing it all over the Commonwealth today, make no mistake about that! Major problems that must be faced up to by the membership and resolved in a manner that will be satisfactory to all—television interference, foreign encroachment into frequency channels expressly allocated to the Amateur Service, National and Civil Defence Emergency Networks and their co-ordination, W.I.A. representation on behalf of Region III, at the next International Telecommunications Convention—all these things must be faced up to now, not when the crisis is reached!

By meeting each other and discussing these things amongst other interesting Amateur activities, by taking an interest in attending monthly meetings and other organised gatherings of Amateurs, by taking an interest in the administrative organisation behind your meeting and the Institute in general and regularly attending its functions, by giving a little of your spare time to the problems confronting the Institute—by all these things your hobby can endure for you and the generations of Amateurs to follow on in the years that yet lie ahead.

Will you attend your meetings and do your bit to protect the greatest hobby you will ever enjoy?

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TRANSMITTER CONTROL

BY R. M. WINCH,* VK2OA

Recently, the author took stock of his transmitter layout and decided that an overall plan was necessary.

To enable operation on any of the bands from 3.5 to 144 Mc., it is necessary to have at least three transmitters—one for each band would be the ideal, of course. However, operation on more than one band at a time was not envisaged so it was considered that it would be an expensive luxury to have separate power supplies, modulators, keying circuits, etc. Hence, it was considered feasible to have one unit which would supply all power and contain all controls.

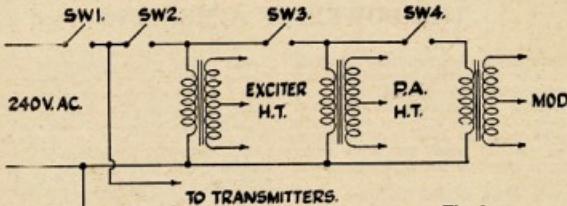


Fig. 1.

This, of course, would impose limits on the design of the various transmitters. After some thought it was decided that this was not as great an obstacle as it first appeared, so it was decided to go ahead and work out a design for such a unit.

The first step in designing was to draw up a set of specifications. Consideration of the contents of the junkbox, some counting of the available bawbees and past operating experience dictated that the design should conform to the following—

REQUIREMENTS

- A maximum power of 50 watts under modulated conditions.
- A HT supply of 400 volts for the final, 300 volts for the exciter, stabilised 150 volts for the oscillator, and screen keying at 150 volts.
- A minimum of operating controls, i.e. as near automatic operation as possible.
- Simple and quick change from one transmitter to another.
- Provision for A2 operation.
- Standardisation of components.
- A constant check on percentage of modulation independent of which transmitter is in use.

A preliminary design was worked out and a unit built up which, after some experimenting, finally worked satisfactorily. As several novel features have been included, it is thought that a brief description of the complete unit plus a detailed description of several of the circuits would be of interest.

CONTROL The complete unit is built on one chassis which is placed on the operating desk alongside the receiver. On the front panel are mounted the control switches, gain controls, tone oscillator, pitch control, microphone and key sockets and the modulation indicator.

At the rear of the chassis are six octal sockets, wired in parallel, which act as sockets to the various transmitters.

Each transmitter has its own filament transformer and aerial change-over relay. In each transmitter is incorporated a switch in the 240-volt AC supply to the filament transformer and a 5-pole

fraternity. They are cheap, readily available, neat and conservatively rated at 240-volts, 5-amps in either SPST or SPDT. They come in several brands, both brown and white and the escutcheons are easily engraved.

The following circuits are controlled by these switches: Filament supply, exciter HT, final HT, modulator, phone send-receive, oscillator on for VFO setting. The first four switches are wired as shown in Fig. 1. The function of the other two will be described later.

POWER SUPPLIES There are three power supplies, identical except for the type of rectifier valve. The transformers are 385-volt aside, 150 Ma. broadcast type. The filter circuits are the usual 8 uF.-choke-8 uF. type using ordinary 8 uF. 250-volt electrolytics. Each supply has a 200 Ma. dial light wired in the centre-tap lead to cope with accidental shorts.

By using three different types of rectifiers, different voltages are obtained from each supply. With a 5Y3 the exciter pack delivers 320 volts. The PA supply, with a 5R4GY, gives 400 volts, and by using a 5V4 in the modulator supply 450 volts is obtained.

The complete diagram of the exciter power supply and the control circuits is given in Fig. 2. T1, V1, L1, C1 and C2 are the power supply delivering, under load, approximately 350 volts across the points A and D. R1, R2 and R3 form a voltage divider with the point B at 150 volts and the point C at 10 volts positive to the point D. Terminal 1 is connected to the exciter HT terminal in the transmitter, terminal 2 to the screens of the keyed stages, 3 is the oscillator HT, 4 is the common earth, and term-

switch to break the HT circuits. This latter switch takes various forms in the different transmitters. For instance, in the 40-metre transmitter it is a straight 5-pole on-off switch, but in the 2-metre transmitter it is combined with the crystal switch. In all cases ordinary wafer switches have proved adequate for the power involved.

The control switches on the front panel are ordinary domestic miniature architrave switches. These switches are worthy of attention by the Amateur

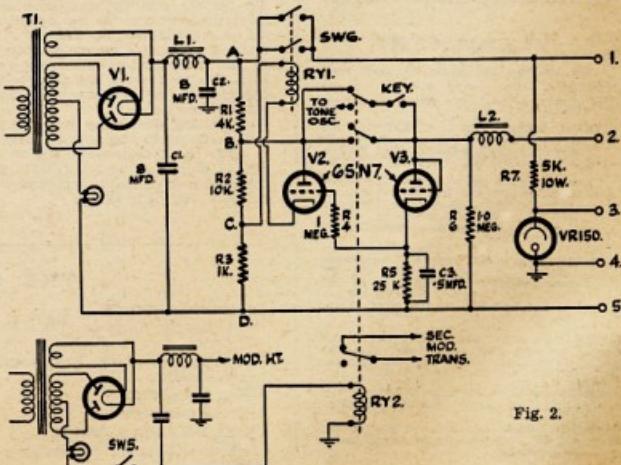


Fig. 2.

* 38 Boundary Street, Parramatta, N.S.W.

inal 5 goes to the coil of the aerial change-over relay, the other side of which is connected to earth.

C.W. Now consider what happens with the key up. The grid of V2 is connected to the negative side of the supply via R4 and R5. The cathode connects to point C which is 10 volts positive. This is sufficient to cut-off V2, consequently the valve draws no plate current and Ry1 remains open. When the key is closed the 150 volts from point B is applied to the anode of the diode-connected V3 which becomes conductive and charges C3 to nearly 150 volts.

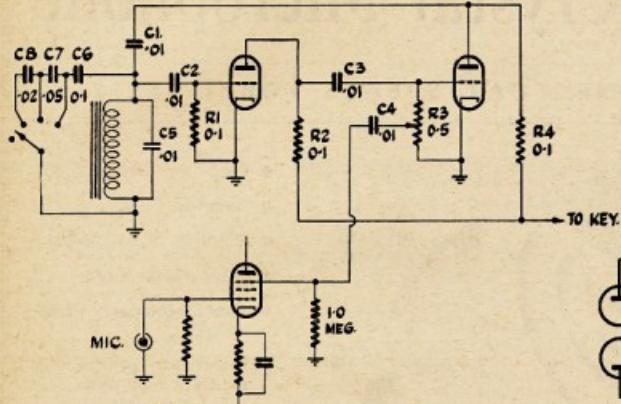


Fig. 3.

Since the grid of V2 is connected to the cathode of V3, it will also go to 150 volts positive—or at least it would if R4 were not in circuit. As soon as the grid of V2 has gone positive with respect to its own cathode, it commences to draw current. R4 keeps this grid current within reasonable limits, but allows the grid to remain at a slight positive potential. V2 now conducts and the resultant plate current causes Ry1 to close, supplying HT to the exciter and via R7 and the VR150 to the oscillator. 150 volts is also supplied from the key to the screens of the keyed stages.

The total HT current of the exciter and the VR150 is flowing through the coil of the aerial change-over relay so it too operates and the transmitter emits a signal.

When the key is lifted, the 150 volts is removed so the transmitter stops transmitting and V3 stops conducting. However, C3 does not instantly discharge due to the high value of R5. This means that the voltage across C3 falls at a comparatively slow rate. When it has reached a low enough point, V2 stops conducting and Ry1 opens, thus removing voltage from the oscillator and allowing the aerial change-over relay to re-connect the aerial to the receiver. If, however, the key is closed again before the discharge of C3 has reached this point, C3 recharges to the full voltage and the delay commences all over again.

Thus it can be seen that Ry1 closes instantly with the first closing of the key, but opens only if the key is left open for a definite time, this time depending on the values of C3 and R5. With the values given, Ry1 just opens between words at normal keying speeds.

Ry1 needs to be a fast closing relay with a bobbin that will operate on a couple of milliamperes. If extra contacts are available, these may be used to silence the receiver. Sw6 is a switch mounted on the front panel of the unit and is used to set the VFO.

Let us have another look at the keying circuit. Very few tubes will key

it to close. The three contacts on Ry2 then perform the following functions: Closes the keying circuit, changes over the key circuit so that it now supplies HT to the tone oscillator, and removes the short across the secondary of the modulation transformer.

SWITCHING The full switching procedure is: Make Sw1 and Sw2, close the filament switches on the transmitters which it is anticipated will be used, close the HT switch on the transmitter required. When the filaments have warmed up, close Sw3. The transmitter is now ready for c.w. operation and merely requires manipulation of the key. For phone operation Sw4 is made at the same time as Sw3. Sw5 is then the send-receive switch.

Note.—When Sw5 is made, the key is automatically connected to the tone oscillator, so keep clear of it when operating on frequencies below 30 Mc. To prevent accidental transmission of the wrong type of emission on these bands, the author turns the tone oscillator gain to zero.

With Sw1-4 made, either c.w. or phone transmissions can be made without any further changing over. Hitting the key gives c.w., making Sw5 and speaking gives phone, and making Sw5 and hitting the key gives m.c.w.

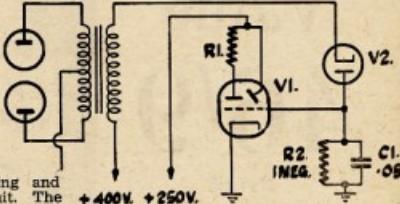


Fig. 4.

satisfactorily merely by opening and closing the screen supply circuit. The keying will have a poor break characteristic and considerable backwave. The cure is to apply a small negative bias to the screen when the key is open. This makes the keying clean and positive. R6 supplies this negative bias. With Ry1 closed and the key open, the power supply is feeding the oscillator and the VR150. This current is flowing through the bobbin of the aerial relay, i.e. from terminal 5 to terminal 4, and causes terminal 5 to assume a negative potential with respect to earth. This is fed to the screens via R6 and provides the negative cut-off bias.

L2 is a keying filter to get rid of the clicks. A point to watch here is that L2 works on both the make and break as the screen circuit is still closed with the key open so that if a large screen bypass condenser is used, the keying will have unduly long tails. Another point is that L2 is working into a higher impedance circuit than would be encountered with cathode keying and needs to be of a higher inductance value. A small filter choke does a good job in the author's transmitter.

PHONE For phone operation, Ry2 does all the switching. Ry2 is a disposals relay with a 28-volt bobbin of approximately 250 ohms resistance. Sw5 is the send-receive switch on the front panel. When Sw5 is closed the full HT current of the modulator flows through the bobbin of Ry2 and causes

TONE The tone oscillator circuit is shown in Fig. 3. A 6SN7 is used as a Franklin oscillator and the output is taken from the grid-leak of the second half and fed to the suppressor of the 6SJ7 which is the first stage of the modulator. (The remainder of the modulator is a 6N7 phase inverter driving a pair of 6L6s in Class AB1.) The coil for the tone oscillator is the primary of an ordinary speaker transformer.

MODULATION CHECKER Fig. 4 is the circuit of the modulation checker. V2 may be any type of tube which will stand the HT voltage. The author uses a 6V6 with the plate, screen and grid tied together. A separate filament winding, which is not earthed, must be used to avoid exceeding the rated heater-cathode voltage of the valve. V1 is an ordinary "magic eye."

The circuit operates in the following manner. With no modulation, the cathode of V2 is 400 volts positive with respect to earth. With modulation, this voltage swings up and down about the mean voltage of 400. 100% modulation will cause it to swing up to 800 volts and down to zero. However, with any percentage of modulation below 100, the cathode is always positive with respect

(Continued on Page 7)

INTRODUCING THE NEW

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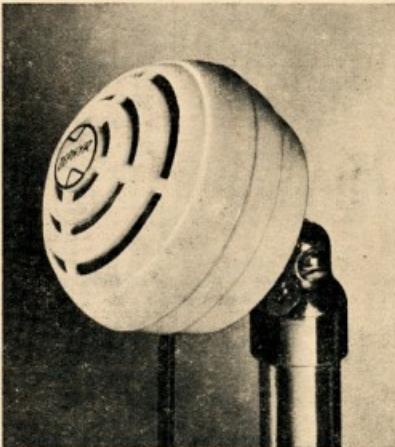
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THE COMPLETE AMATEUR

PART TWO

BY TOM ATHEY,* A.I.R.E. (Aust.)

SECTION ONE (Continued)

I.F. Channel

The channelist, as I term the i.f. channel, is a normal conventional double converted job, using 1600 Kc. and 100 Kc. Looking at the schematic, you see that the input from the converter is fed to the standard set-up of short wave aerial and oscillator coils, tuned with a two-gang condenser. This two gang condenser is one of the midget b.c. type of approximately 450 pF. No dial is needed as the gang is set to the acceptance frequency from the converter, then screw-driver locked. This way the input frequency is fixed to the output frequency of the converter, and should require no further adjustment, once set.

The use of ordinary s.w. coils will present no difficulty in obtaining parts, hence their use.

Tune the converted frequency to the i.f. frequency of 1600 Kc. and feed it through the first i.f. amplifier valve in the normal way. The plate output from the i.f. amplifier is then fed to a second converter having a frequency difference of 100 Kc.

Again, as crystals of either 1500 or 1700 Kc. may be hard to obtain, an ordinary b.c. oscillator coil can be used in the oscillator portion. Use a slugged coil and with a fixed padger across the coil, it is possible to slug the coil to the required frequency difference of 100 Kc. As is well known, the b.c. coils

* Ex-Instructor Q'land Division, W.I.A. Classes; 41 Mountford St., New Farm, Brisbane.

hold their frequency without drifting to a remarkable degree of accuracy.

The new i.f. frequency of 100 Kc. is again fed to a second i.f. amplifier, only this time use a valve having diodes in its make-up, such as an 6SN8, or 6G8G. These diodes are used for the pick-up of the voltage for the a.v.c., more of which will be spoken about later. The new 100 Kc. i.f. frequency is now fed to the twin diode valve (either a 6AL5 or a 6H6).

The first diode acts as a demodulator for feeding audio to the driver stage. The second diode acts as a series noise limiter, controlled by an on-off switch. In either case, the audio output is fed to a voltage amplifier. This valve can be either a triode or a pentode, but I have always found that a triode will give you plenty of gain if it is wired in as shown in the schematic.

For the sake of economy use a 6SN7 here. There are plenty of these tubes around (usually for about 5/- each). Wire it as a triode. The only difference to the standard circuit is that the cathode is earthed instead of having cathode bias. Examination of the driver portion of the circuit shows how the valve is connected. I use this system always and find it very satisfactory.

The driver stage is then fed to the output valve. It is not necessary to use a large output here because it is unnecessary. So long as the volume is sufficient to give reasonable output to the speaker system, there is no need to worry the neighbours with the results of your prowess in hearing a VK1 or

the other side of the world. A 6K6 valve is all you need (or a 6MS). If you are content with low output, use a 6AM5. This valve will deliver about $\frac{1}{2}$ of a watt of audio and at the same time keep your final power valve drain down to 19 Ma. (instead of the normal 50 Ma.)

Regarding the speaker system, I have shown two. These are of the three inch type. This is just a bit of flashiness to balance the panel and need not be followed. One 5" speaker will do quite as well.

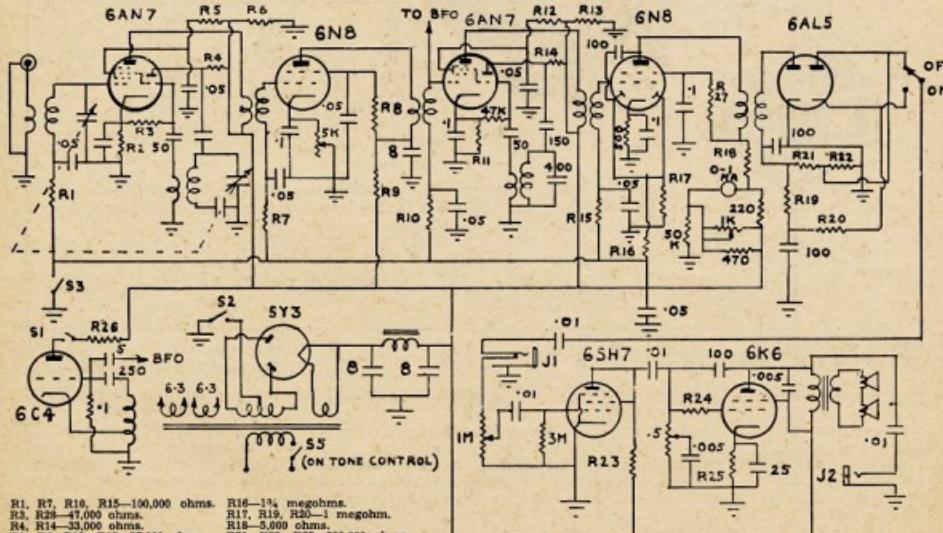
The b.f.o. valve is half of a 6SN7 or a similar type (12AU7) and beats against the 1600 Kc. i.f. input to the second converter. A small condenser is used to vary the note and to allow you to zero-beat the b.f.o.

The other half is used for the "Guess Meter"—I term it this way as in most cases it is only guess work. The calibration of such a meter is left to your own individual requirements.

A FEW POINTS ON CONSTRUCTION

From the drawings of the chassis (see August issue) you will see how the recess for the plug-in converters is made. Cut out the recess from your chassis, making it neat and square. Make the opening a free fit, but do not allow it to become too free.

Align the pins accurately so that when the converter is slid in, the pins engage the sockets easily and tightly. Care must be exercised that you allow for the pins in the depth of the opening front to rear. A panel that does not fit snug





The inspection of Mullard picture tube gun assemblies.



SEEN but not HEARD

VOLTAGE AMPLIFYING PENTODE EF86

Low-noise pentode primarily intended for use in high-gain R.C. coupled A.F. voltage amplifier stages.

CHARACTERISTICS

| | | |
|---------------|-------|------------|
| V_b | 6.3 | V |
| I_b | 0.2 | A |
| C_{out} | 5.5 | $\mu\mu F$ |
| C_{in} | 4.0 | $\mu\mu F$ |
| C_{g1-g2} | 0.025 | $\mu\mu F$ |
| V_g | 250 | V |
| V_{gs} | 140 | V |
| I_s | 3 | mA |
| I_{gs} | 0.55 | mA |
| V_{gs} | -2 | V |
| V_{gs} | 0 | V |
| R_g | 1.85 | mA/V |
| r_{ds} | 2.5 | $M\Omega$ |
| μ_{g1-g2} | 38 | |

OPERATING CONDITIONS

| AS R.C. COUPLED PENTODE A.F. AMPLIFIER | | |
|--|-------|-----------|
| V_b | 250 | V |
| R_a | 10.1 | $M\Omega$ |
| R_{g1} | 10.39 | $M\Omega$ |
| R_s | 11.0 | $k\Omega$ |
| * R_{g2} | 330 | $k\Omega$ |
| I_s | 2.05 | mA |
| V_{out}/V_{in} | 112 | 180 |

* Grid resistor of following valve.

† Values $\pm 10\%$.

The Mullard EF86 is an all-glass, low noise valve, with the universally accepted single-ended 9-pin technique. The total generated noise expressed in terms of an input to the grid is less than 5 micro volts.

Incorporating the best features of the earlier low noise, low hum, low micro-phony types, the Mullard EF86, like the picture tube, is truly a valve that is seen but not heard.

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ULTRASONIC GENERATORS — PERMANENT MAGNETS — MAGNETIC MATERIALS AND COMPONENTS, ETC.

MRS-43

and close to the main panel spoils the whole appearance of the job.

The positioning of the controls, shown on the channel panel is self-explanatory, and should not need any comment. The speaker panels are again just a bit of skiting, but if done in chrome would look "super."

When building the power pack, work out the number of millamps you want to handle the valve line-up, not forgetting the converters. Under normal requirements a transformer of about 100 Ma. of h.t. is ample, but again this depends on your own requirements. The filaments need about 4 amps. of current to be on the safe side, so I would suggest that your transformer be as follows:

One transformer: 100 to 120 Ma. h.t. 280-0-280 volts, two filament windings of 6.3v. at 3 amps. each, one filament winding of 5v. at 2 amps. One of this type would allow a safety margin and avoid a risk of burn-outs.

A.V.C.

A.v.c. is picked up from the diodes of the second i.f. amplifier and fed to all stages on the channelist. Provision is made by means of a switch to cut off the a.v.c. at will and allow you to run the set at maximum gain, when chasing those weak signals.

The size of the S meter is an optional matter. There is on the market a meter already calibrated for signal strengths. I'm not sure but I think it is supplied by The Master Meter Co. Enquiries from the trade houses in your town would clear up this point.

That's all chaps on the receiver. The rest is up to you. One thing, if you decide to build it up, I feel sure that the effort you put into it will be well worth while. It virtually is a 10 valve triple conversion super having high gain, good selectivity, and low noise ratio to signals.

BOOK REVIEW

Low Frequency Amplification

Low Frequency Amplification by Dr. N. A. J. Voorhoeve, p.p.495. Published in the Philips' Technical Library series. Our copy by courtesy of Philips, of Holland.

This book contains a lot of interest to Amateurs, excepting, of course, the dyed-in-the-wool c.w. only types. It covers almost the whole of the audio field, not only amplification as the title would suggest, but all the auxiliaries like microphones, recordings, pick-ups, loud speakers, power supplies, components and measurements.

Now this is quite a lot to pack into one book. The author has done a good job in selecting what to put in and the result is about the right standard for the Amateur. It is not a designer's manual nor is it a collection of circuit diagrams, but it steers a middle course in a very readable manner.

Like most European books, a number of unknown valve types are mentioned, but the characteristics of the more important ones are given. All the examples are taken from Philips products but the book is in no sense a trade catalogue or a sales pamphlet, but one which can be recommended.

-A.K.H.

Screen Modulation

Mr. J. A. Gazard, B.E., of 39 Glenhuntly Street, Woodville, S.A., has raised a point regarding the article "A New Modulator for the Type 3," in August issue of "A.R." which was not mentioned in the original description. We print, therefore, his remarks on the subject, which applies to all systems of Screen Modulation.

With the arrangement shown, the screen of the 6L6 is at 250 volts without modulation, but under full modulation it will vary from 0 to +500v. The rise from 250 to 500 volts will not give a corresponding increase in r.f. amplitude and consequently the envelope of the output wave will be very distorted, having small positive and large negative peaks.

Goodman, in June, 1954, "QST," page 15, says re screen modulation—

"If we make it (the operating voltage of the screen) the normal screen voltage for the tube used as an r.f. amplifier, we are going to swing it up to twice this voltage on peaks. Two things can happen. The tube can burn up because it is being overloaded, or the output can increase without hurting the tube, showing that we were not getting as much out in the first place as we could have got. The only way is to first find out what the tube can do as a straight r.f. amplifier and then cut the screen voltage back to about one half."

In the case of the Type 3, we are getting all we can out of the 6L6 and therefore it is just as necessary to drop the screen voltage back to about half using either the choke or the transformer for modulation.

Transmitter Control

(Continued from Page 3)

to the anode (earth) and no current flows through V2. If the modulation exceeds 100% the cathode swings through a voltage range greater than 400 in each direction.

In the upward direction, this will be greater than 800 volts, but in the downward direction, the cathode will assume a negative potential with respect to the anode as soon as the modulation exceeds 100%. It will then conduct and charge up C1, thus making the grid of V1 negative and causing the "eye" to close. By omitting C1 and using R2 only, the "eye" would close on over-modulation peaks, but the time of closure would be the same as the duration of the peak.

With the transients encountered in speech the flicking of the "eye" would be so fast as to be hard to see, but by using the C1-R2 combination the peaks are lengthened and are plainly visible even with the "eye" not in direct view.

A word of warning must be sounded about this system however. Its purpose is merely to indicate when the modulation exceeds 100% on the negative peaks. An oscilloscope should be used to adjust the transmitter so that the modulation is symmetrical and linear. After that the gain control should be set so that the "eye" closes on heavy words. This means that the modulation is exceeding 100% on peaks, but also ensures that the modulation is sufficient at all times.

AMATEUR CALL SIGNS

FOR MONTH OF JULY, 1954

ADDITIONS

VK—New South Wales
2WN—E. R. Woodward, 59 Victoria Ave., Mortdale, S.E. 15.
2ZS—W. J. Smith, 23a Sandringham St., Sans Souci.
2AEQ—B. D. Pronger, 5 Richmond St., Croydon, S.E. 4.
2AJB—P. C. Bennett, 19 Heaton St., Westmead.
2AVQ—R. E. McKeown, P.O. No. 1, 19 McKeown St., Maroubra Bay.
2AXW—C. F. Wade (Lt.-Col.), 4 Hope Ave., North Manly.
2AYB—S. C. Burton, 52 Arcadia St., Penshurst.
2ZAD—F. D. Druitt, 20 Cann St., Griffith.
2ZAP—E. Pearce, 19 Marion Gardens, Narrabundah, Canberra, A.C.T.

Victoria

3BY—O. Holst, 27 Bambara Rd., Caulfield, S.E. 7.
3VS—I. L. Griffin (Rev.), 2a Clifton Gr., Coburg, S.E. 13.
3AC—W. R. Clifton, 9 Clarence St., Elsternwick.
3ACD—R. A. Hipwell, Pier Street, Dromana.
3AQ—J. M. Ray, 34 Newton St., Shepparton.
3AXA—R. A. Watson, Back Beach Rd., Portsea.
3ATB—R. Brownhill, 26 St. Helens St., East Geelong.
3ZH—R. L. Haymes, 87 Holmes Rd., Moonee Ponds.

Queensland

4XB—G. J. Bean, 69 Beryl Cres., Holland Park, S.E. 3. Western Australia
5KO—R. K. Westbrook, 25 French Ave., Merton.
5QO—F. L. Gray, 107 Kensington St., East Perth.
6ZI—B. D. Woods, C/o. O.T.C. Wireless Station, Applecross.

Tasmania

TMA—M. G. Burleigh, S Pitt Ave., Maraway-lee, Leuncester.
Tatterslies
5JH—J. F. Hanrahan, C/o. Dept. of Civil Aviation, Port Moresby.
5PF—T. P. Filmer, Kaviling, New Ireland, T.N.G.

ALTERATIONS

VK—New South Wales
2BY—57 Jamison St., Bondi Hill South.
2FV—24 George St., Greenwich Point, Sydney.
2F—2 Carrington Avenue, Caringbah.
2MJ—22 Kurrajong Street, Sutherland.
2QY—V. V. Anderson, Hunter's Hill, Sydney.
2TH—Flat No. 4, 5 William Street, Randwick.
2VH—Clips Road, Concord.
2AKW—24 Davidson Street, Concord.
2APQ—55 Bridge Road, Hornsby.
2ARD—2nd Floor, "A" Camp," Snowy Mountain Authority, Cooma.
2ARY—13 Kelvin Avenue, Picnic Point, Panama.
2AVO—Federal, via Lismore.

Victoria

3KY—29 Elizabeth Street, East Brighton, S.E. 5.
3OA—Station 69 Pitt Street, Kerang; Postal: P.O. Box 51, Kerang.

3AAP—26 Mitchell Street, Maidstone.
3AF—75 Berry Avenue, Chelsea.

3AJH—13 Liberty Parade, West Heidelberg.
3AM—Main South Road, Drouin.

3AMV—Vic. 10, Vasse, Warrnambool.
3ATL—Station: Congregational Church Hall, Gheringhap St., Geelong; Postal: 158 Kilgour St., Geelong.

Queensland

4CJ—Cr. Joe and Naughton Streets, Wandal, Rockhampton.
4ES—Ford Street, Upper Mt. Gravatt, Brisbane.
4IM—No. 67 Thorn Street, Kangaroo Point.
4LT—Drayton Street, Nanango.
4NG—Station: McIwain St., Rockhampton; Postal: P.O. Box 23, Rockhampton.

South Australia

5MY—15 Mackay Avenue, Plympton.
5RP—7 Glenloch Avenue, Westbourne Park.

Western Australia

6BY—Cr. Glenelg and Bombard Sts., Applecross.
6FC—16 Brook Street, Kalgoorlie.

Tasmania

7BK—23 Dowling Avenue, Beaconsfield Point, Hobart.
7WN—House No. 558, No. 2 Camp, Terraleah.

Territories

9GV—C/o. D.C.A. Mess, Lse.

DELETIONS

New South Wales: VKS 2BR, 2ZT (now operating under 2ZP), 2ZV, 2WV, 2AB, 2AN, 2AS, 2AM, 2AAW (now operating under 2TAH), 2AZM.

Victoria: VKs 3JW, 3OP, 3WW, 3AFR, 3APR (now operating under 2AEQ).

Queensland: VK 4JH (now operating under 2JF).

South Australia: VKSCW (now operating under 2AAC).

Territories: VKR90.



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W.A.: Nicholson's Ltd., Atkins (W.A.) Ltd.,
Carlyle Pty. Ltd.

TAS.: W. G. Genders Pty. Ltd.

VK-ZL DX CONTEST, 1954

N.Z.A.R.T. and W.I.A., the National Amateur organisations in New Zealand and Australia, invite world-wide participation in this year's VK-ZL DX Contest. The object is for the world to contact VK and ZL stations, and vice versa.

When: PHONE—24 hours from 1000 hours G.M.T. Saturday, 2nd October, to 1000 hours G.M.T. Sunday, 3rd October. C.W.—24 hours from 1000 hours G.M.T. Saturday, 9th October, to 1000 hours G.M.T. Sunday, 10th October.

RULES

1. There shall be three main sections to the Contest—(a) Transmitting C.W., (b) Transmitting Phone; (c) Receiving, Phone and C.W.

2. The Contest is open to all licensed Amateur transmitting stations in any part of the world. No prior entry need be made. Mobile Marine or other non-land-based stations are not permitted to enter the Contest.

3. All Amateur frequency bands may be used, but no cross-band operation is permitted.

4. Phone will be used for the first week-end and c.w. for the second week-end. Stations entering for both phone and c.w. sections must submit entirely separate logs for each.

5. Only one contact per band is permitted with any one station for contest purposes.

6. Only one licensed Amateur is permitted to operate any one station under the owner's call sign. Should two or more operators operate any particular station, each will be considered a competitor and must submit a separate log under his own call sign.

Cyphers: Before points may be claimed for a contact, serial numbers must be exchanged and acknowledged. The serial number of 5 or 6 figures will be made up of the RS (telephony) or RST (c.w.) reports plus three figures which may begin with any number between 001 and 100 for the first contact and which will increase in value by one for each successive contact, e.g., if the number chosen for the first contact is 053, then for the second contact the number must be 054, for the third 055 and so on. If any contestant reaches 999, he will start again with 001.

Scoring: For VK and ZL stations ONLY—Fifteen points will be scored for the first contact on a specific band with any overseas country; fourteen points will be scored for the second contact on the same band with the same country; thirteen points for the third and so on to the fifteenth contact which will score one point. All contacts with that particular country on that band will thereafter count one point each. This scoring procedure will be repeated on each band to encourage multiband operation. There will be no VK-ZL contacts between each other. Official A.R.R.L. countries list will be used. Note: Points will not be entered in the log for each contact—totals for each country will be shown in the summary. Each CALL AREA in the U.S.A. will be a "country" for scoring purposes.

Overseas Scoring: One point will be scored for each contact on a specific band with any VK-ZL district. The final score will be derived by multiplying the total contacts on all bands by

the total number of VK-ZL districts worked on all bands. VK-ZL districts are: ZL—1, 2, 3, 4; VK—1, 2, 3, 4, 5, 6, 7, 9.

Logs: (a) Logs must show in this order: Date, time in G.M.T., band of operation, call or station worked, serial number sent, serial number received.

(b) A separate log must be submitted for each band. For each band an analysis sheet must be given showing: List of countries worked with numbers of contacts for each country and points claimed for each country worked, and total points for that band.

(c) A summary sheet to show: 1, station call sign; 2, name and address of the operator; 3, phone or c.w.; 4, list of points claimed for each band; 5, grand total of points; 6, brief description of equipment used during the Contest—transmitter, power, antenna, etc.

(d) A declaration that all Contest rules and regulations for Amateur Radio in your country have been observed and that the log is correct and true to the best of your belief.

10. The right is reserved to disqualify any entrant who, during the Contest, has not observed regulations or who has consistently departed from the accepted code of operating ethics.

11. The ruling of the Executive Council of N.Z.A.R.T. will be final in the event of any dispute.

12. **Awards:** N.Z.A.R.T. will award attractive certificates to the top scorer on each band and the top scorer in each VK and ZL district. Awards will be announced by N.Z.A.R.T. and W.I.A. Additional certificates will be awarded, depending upon the number of logs received.

13. Entries from VK and ZL stations should be posted to N.Z.A.R.T. Contest Manager, Box 469, Wellington, New Zealand, to arrive no later than 21st January, 1955.

Receiving Section

1. The rules for the receiving section are the same as for the transmitting section, but it is open to all members of any shortwave listeners' society in the world. No transmitting station is permitted to enter for the receiving section.

2. The Contest times and logging of stations once on each band per weekend are as for the transmitting section. Logs will take the same form as the transmitting section.

3. To count for points, the call sign of the station being called; the call sign, strength and tone of the calling station, together with the serial numbers sent by the calling station must be entered in the log. Scoring will be on the same basis as for transmitting stations.

4. It is not sufficient to log a station calling CQ.

5. VK receiving stations may log overseas stations and ZL stations, while ZL receiving stations may log overseas stations and VK stations.

6. Certificates will be awarded to the highest scorers in each country. Extra certificates may be issued depending upon the number of entries received.

AN AID FOR COMPUTING SCORE

| No. of Contacts | Pts. | No. of Contacts | Pts. |
|-----------------|------|-----------------|------|
| 1 | 15 | 11 | 110 |
| 2 | 29 | 12 | 114 |
| 3 | 42 | 13 | 117 |
| 4 | 54 | 14 | 119 |
| 5 | 65 | 15 | 120 |
| 6 | 75 | 16 | 121 |
| 7 | 84 | 17 | 122 |
| 8 | 92 | 18 | 123 |
| 9 | 99 | 19 | 124 |
| 10 | 105 | 20 | 125 |

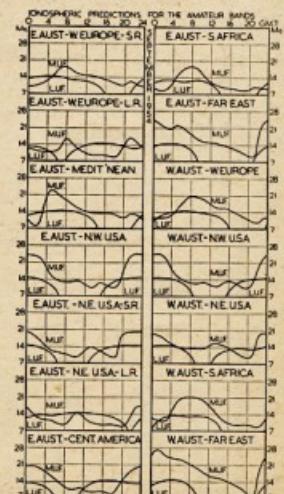
Wireless Operator Required for Flying Doctor Service

The Victorian Section of the Flying Doctor Service of Australia, which established and maintains the Flying Doctor Base at Wyndham, North-West Australia, is establishing an additional base at Derby, W.A.

Tenders have been accepted and it is expected that the building for the Wireless Control Station, and the Operator's Residence, will be completed early in the new year.

A Wireless Operator for the Base is required, and any member of the Institute interested is invited to communicate with the Secretary of the Section, Mr. J. W. Collings, 434 Collins Street, Melbourne. An up to date residence, providing for the operator and his family is being erected. This appointment offers a good opportunity for a young man possessing the necessary qualifications.

PREDICTION CHART FOR SEPT., 1954



FIFTY MEGACYCLES AND ABOVE

NEW SOUTH WALES

The July meeting of the V.H.F. Group took place at the usual location, Science House in Glebe Park. The evening was spent in devoting to clearing a number of agenda items dealing with future activities of the Group. Then Adrian 2HE explained his method of obtaining a drive to the 2EM final of his new 144 Mc. tx demonstrating the result on a nicely constructed rig. From there the evening quite naturally present joined in discussing unusual questions dealing with various aspects of radio theory, much to the amusement and enjoyment of all.

The Fox Hunt was held on 14 Mc. with results by individual members. The foxes 2HL, was run to ground by John 2WJ. The final location for lunch was at John 2WJ's QTH at Bringley. After lunch, details of the 144 Mc. gear for the 2W link were discussed and a contest ticket list made. The contest winners were TWJ as host, 2ANF, 2HL, 2APQ, 2AJZ, 2AJA, Eric Griffiths and Colin. This has enabled further work to be done in layout and determining the overall size of the units.

The 144 Mc. Mid-Winter Contest took place on the evenings of the 17th and 18th when a total of 25 stations took part—not as many as last year, but an enjoyable contest. The aim was to work as many stations as possible each night between 7 and 11 p.m., only one contact with any station being allowed per contest. The results were as follows: 2ANF 38, 2HL 37, 3HE 36, 2OA and 2APQ 34, 2HO 31, 2HL, 2AJZ and 2ARZ 29, 2XX 27, 2ACK and 2ARZ 17, 2AJZ 14, 2SQZ 11, 2ABT 10. Congratulations to John for a good effort; also to Horrie 2HE. The Contest Manager was very pleased with the number of logs received, 60 per cent—a very good response.

Now that the Mid-Winter Contest has passed, the next important item of the Group is the Spring Field Day to be held on Six-Hour Day Week-end, 3rd October. The object of this fixture is that Sydney stations go further afield than usual to enable more of the country stations to take part. This year the idea is to form a chain of 5 m.e.t. stations from Sydney north to the Hunter District, over the Blue Mountains to the Western Districts, to the South Western, Canberra and back to Sydney, covering as great an area as possible. When the chain will be established and a message passed through the circuit, each station will assist stations operating on either side of them in endeavour to make longer distance contacts.

Plans are being made by the Group for extension of the project to enable links to be made with stations which do not have a return circuit other than the link station they make contact with and it is hoped to extend links to say the North Coast and Inverell to VK3 who will then be able to extend links to VK5 and VK7.

Several country stations have signified their intention to take part and John 2ANF, the Secretary of the Group would like to hear from any station who wishes to take part so that arrangements can be made to perhaps place a portable station in a location to ensure continuity in the circuit.

We heard that John 2AO at Copelston had a 144 contest with 2ANF at Birchill, a distance of 270 miles. A very good effort. This now makes the link through to VK3 possible for the Spring Field Day.

Lectures for the September and October meetings have been arranged and will be "Maps and Mapmaking" and "Points on the manufacture of Condensers" in that order. So keep the first Friday of the month in mind and come to the V.H.F. Group's meetings.

John 2AO continues his work. Hugo 2WH on Wed each night. Adrian 2HE does likewise with Fred 2AGY at Newcastle. Bob 2OA is busy on the drawing board planning the layout of the 2W1 144 Mc. equipment. Ted 2ABO operates his portable down at the West Mount Kerin with a very nice signal. Ted 2XX's tower is fast taking shape. New stations on the band were Norm 2ALJ, Wal 2EW and Jim 2AAS. Welcome to the band chaps.

Grounded grid amplifiers from John 2ANF which should interest those who are experimenting with v.h.f. rx. The layout of grounded grid amplifiers in v.h.f. rx is a fairly obvious one, but many Amateurs still seem to take the wrong line.

The idea is to isolate input and output circuits to prevent regeneration. As the grid is the grounded and shielding element, the plate circuit should be confined to one side of the shield. The bias circuit to the other. The shield should run across the centre of the socket and all components in the cathode and heater circuit kept to one side of the shield. The most common error made is with the grids. Here it is not convenient to run the heater chokes which are essential on the plate side of the shield. This should be avoided.

Even if it means some tricky bending, arrange the shield so that the heater pins are on the cathode side of the shield. This is best carried out by making pin 1 the active plate and grounding pin 2. The shield may then run between pin 2 and the space between pins 1 and 7. Note here a suggestion that may make all the difference in that rx you intend to use for the Spring Field Day.

A few more frequencies to note: 2ALJ 144.2 Mc., 2ABR 144.48, 2TH 144.68, 2QZ 144.92, 2AQB 145.3, 2EW 145.9—2APQ.

VICTORIA

The main activity in VK3 continues to rest with the Western District gang. 3AGD at Coleraine has now a 5 over 5 up 60 ft. SATN at Birchill has a 30 element also up 60 ft. SATN at Werribee has a 4 over 4 up 40 ft. 3CI at Nagambie has a 28 element PCG and has a 32 element. 3LN has a 20 element and new stacked beams are in the course of construction at 2WB in Port Melbourne and 3BQ. This group continues to rack up and has resulted in many excellent contacts and really good and consistent signals are regularly heard from all of the above stations.

3ZAA has made a very exciting initiation to the band and is on every night with an 829 final, feeding into over 5 bands. Yet this activity has been heard from any of the other Z calls with the exception of 3ZAC and 3ZAR.

The C.D.E.N. Fox Hunt last month resulted in the best turn up ever and at the conclusion of the hunt 22 of us enjoyed the hospitality of 3OJ and his wife Dorrie. On this occasion a mass start was tried with the fox car, 3LN, receiving only a ten minute start. On the first run, the fox car was successful in catching the fox. On the second run he was caught by 3ADU, followed by 3YS-JABA combination, then 3ZAA and Norm Dench. On the final run to 3OJ's location, 3YS and 3ADU were again successful. These hunts will continue throughout the month of Wednesday of each month, so put a note on the calendar and if you are home get on the band to help the mobiles with directions.

The V.H.F. meeting this month took the form of a visit to the factory of the Australian Paper Mills and the Group is indebted to Norm Dench for the excellent arrangements. All who participated thoroughly enjoyed an interesting and unusual evening. The VK3 gang are looking forward with enthusiasm to the proposed Australia-wide field day to be arranged by the VK3 boys in October.—3LN.

SOUTH AUSTRALIA

During this month of writing some activity on 57 Mc. should come forth as his chrysallis should be ruptured. The efforts of Bob 2BT succeeded in obtaining some score of co-axial line oscillators for the VK5 boys at a price within their pockets. Brian 5CA has succeeded in using some of a mod. osc. and a second as a power-refuge to work on VK5 in the noise room—some DX, what! And as Brian says: "If I can, who can't!" It has a disc-seal tube with a grounded grid, tuned cathode, double anode circuit and a couple of hundred volts comfortably. Should provide good training ground for my young 2nd ep. Graeme, who is rapidly catching up on his younger years. Thanks Bob from the v.h.f. experimenters. I guess that you, Col. Keith, Ray and all the others will be having a thoroughly happy and interesting time.

235 Mc. also seems to be reviving from its rabbit-killer of last year and Tom STD reports that he is on the band every Sunday 1630 hours or immediate following the 5W1 contest. Tom 2FR also on the lookout for contacts. Tom has made a regular schedule of this for over 18 months and hopes to continue indefinitely. So turn your eyes and beam to the East chaps and Tom ep.

Closely at hand, as the crow flies, is Ian 5ZAA who wasted no time as you can see by the call sign and in spite of his "Varsity career" now becomes an active Amateur; whilst much funnier still, is Don 5ZB at Birrell Hill with ambitions on 144 Mc. and fervent desire to educate the local inhabitants in the art of radio propagation. Should be able to make some contact with Bert! Don when you get time. Hugo 5BC has a 229 in action and is sort of a network with 5TL, 5BC, SLE and 5ZAN should be the goal. I should think Hugie has contacted Birchill again, but has to do so with a pair of shorts of skins but Tom at Renmark is faithful to Hugie and doesn't get much further into the wide open spaces. Wait till you get into them yourself Tom, perhaps the signals will be homing pigeons.

News from the South East concerns mainly the opinions on the tape recording and the

literature. By the time you read this chapter the Institute will own a Fordigraph and I will be able to forward copies of the script to each of you instead of one miserable copy! The months of July and August have been hectic ones for me and I haven't been able to edit the incoming "Crystals", but hope on—my holidays are close at hand and it should appear at the end of August.

April issue of "Radio and Television News" contains an excellent article on the Mc. tx-rx using the 536s in the rx section with usual line-up and a 6AK5, 5AQ5 modulator, and rx audio compound-tuning section of the rx uses a 6AK5 r.f. amplifier, 12AT7 osc. with 19 Mc. A 5ZB is also loosely impedance lit coupled (including the osc. injection on 125-129 Mc.). As this was built for C.D. operation, it should appeal to the mobile-minded enthusiasts. My thanks to the Addisford Library and the SPSC should be available to the interested country boys on application to the Library. "QST" features two pages of data and photos of the "plumbers" working over a 47 mile course on the Mc.-represent 10,000 Mc. Klystrons feeding and being fed by parabolic reflectors making interesting reading.

Oh, well chaps, back to the pipe dreams—5XU.

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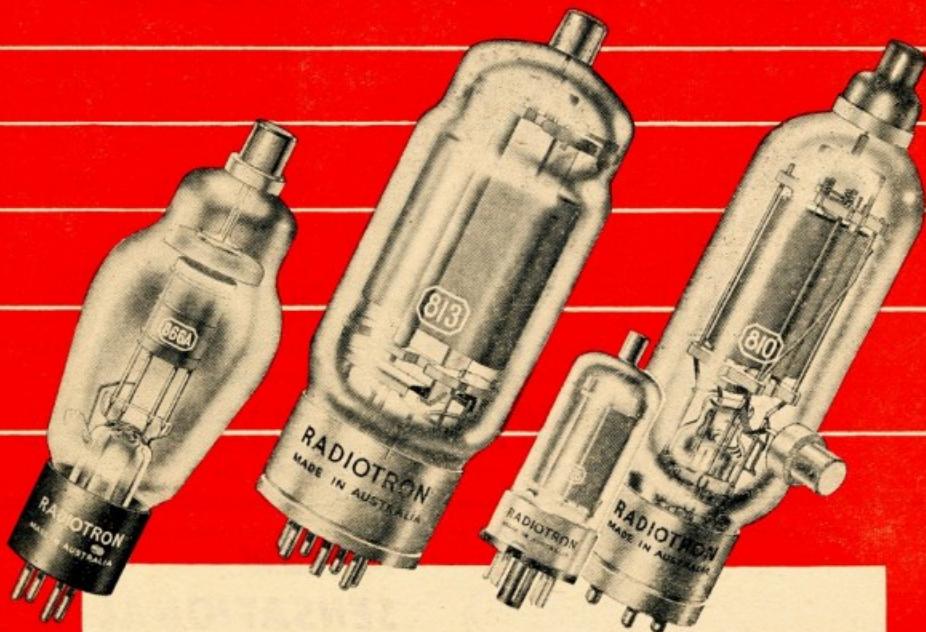
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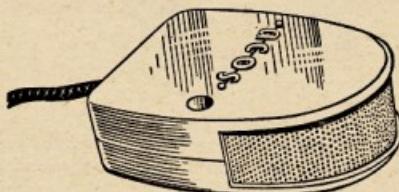
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Fed. President: W. R. Gronow, VK3WG.

Fed. Secretary: G. M. Hull, VK3ZS, Box 2611W, G.P.O., Melbourne.

QSL Bureau: R. E. Jones, VK3RJ, 23 Lansdale Street, Box Hill, E.11, Vic.

BX C.C. Manager: G. I. Morris, 50 Eighth Street, Parkdale, Vic.

NEW SOUTH WALES

President: Jim Corbin, VK2YC.

Secretary: Harry Hickin, VK2ACH, Box 1734 G.P.O., Sydney.

Meeting Night: Fourth Friday of each month at Science House, Gloucester Street, Sydney.

Divisional Sub-Editor: Ted Whiting, VK3ACD.

15 Lansdale St., Five Dock, N.S.W.

QSL Bureau: J. B. Corbin, VK3YC, 16 Maione St., Eastlake, Sydney (Inwards and Outwards).

Zone Correspondents: North Coast and Tablelands: Noel Hanson, VK2AHM, Ryan Ave., West Kempsey; Newcastle: Ron McD. Sturt, VK2ASJ, 99 Dunbar St., Stockton; Coaldale: Eric Fisher, VK2AF, 120 Coaldale St., Fort Ave., Cessnock; Western: W. H. Stitt, VK2KWH, Cambionia, Forbes; South Coast and Southern: Eric Fisher, VK2DY, 2 Oxlade St., Warrawong; South Western: J. W. S. Edge, VK2AD, 100 Pitt St., George's Head, Chatswoode, Coyle, VK2YK, 84 Carlton Cres., Kogarah; Western Suburbs: Barry White, VK2AAAB, 33 Flavelle St., Concord.

FEDERAL

EMERGENCY OPERATION

Conditions and circumstances of National Emergency Operation are fully covered in the Handbook for Operators of Amateur Wireless Stations. Those relating to "Local" Emergency Operations are less explicit.

In relation to this Federal Executive sought classification from the Amateur Administration. Although it is not possible to lay down inflexible rules to be observed, the following points are published in order that Amateur Station Operators will have some knowledge of what can be expected of them.

In an emergency of "Local" nature, the Amateur Station should always place himself under the direction of the civil authority co-ordinating all activities relating to the emergency. This is not possible to lay down inflexible rules to be observed, the following points are published in order that Amateur Station Operators will be the directing authority. However, it is suggested that as a general rule the Amateur should first consult with the local Police.

As the licensee is responsible for the operation of his station he should seek that only authorised traffic is passed through his own call sign is used. Only frequencies within the Amateur bands should be used. The co-ordinating authority will be responsible for the traffic that is passed and no fees will be claimed or accepted by the Amateur Station licensed.

Regarding the fine tradition shown in the past by Amateurs in Australia, it is assumed that this outline will be of value to those worthy stalwarts who render valuable service in situations requiring immediate action.

ANOTHER ONE TO GO FOR!

The Amateur Radio Association of Trieste (A.R.A.T.) has instituted an award, "W.M. F.I.T.T. C.T.", which will be issued to any licensed Amateur submitting confirmation of any two-way communication with Amateur Stations in the Free Territory of Trieste. Contacts may be in any of the Amateur bands from 3.5 to 144 Mc.

Full details can be obtained from A.R.A.T., Box 361, Br./U.S. Zone, F.I.T.T., Trieste.

AMENDMENT TO FEDERAL CONSTITUTION
Under the direction of the Federal Council of the Wireless Institute of Australia, Federal Executive hereby gives notice that it is intended to alter the Federal Constitution (1947) of the W.I.A., as follows:

Section 20. By deleting after the word "and" in the second (2nd) line, the words "two other members" and inserting in lieu thereof, the words "four other members".

VICTORIA

President: G. Dennis, VK3TF.

Secretary: C. Gibson, VK3FO.

Administrative Secretary: Mrs. G. Pickering, 140 Collins St., Queen St., Melbourne.

Meeting Night: First Wednesday of each month at the Radio School, Melb. Technical College.

Divisional Sub-Editor: K. E. Pincott, VK3AFJ, 14 Dunscombe Ave., Ashburton, S.E.11.

QSL Bureau: Inwards—Graham, Roper, VK3ZB, 21 Lucas St., South Caulfield, Vic. Outwards—Frank Chappell, VK3OF, 199 Thomas St., Hampton, S.E. Vic.

Zone Correspondents: Central Western: Merv. Collins, 18 Natimuk Road, Horsham; South Western: W. Wines, 11 Redford St., Warrnambool; and E. Goldings, VK3ANJ, Nelson St., Warrnambool; North Eastern: D. D. Smith, VK3FD, "Brooklands," Warrning; Far North Western: M. Folie, VK3OZ, 101 Lemon Ave., Mildura; Eastern: Leo Dwyer, VK3SG, and John Battwick; North Western: C. Case, VK3ACE, Cumming Ave., Birchip.

QUEENSLAND

President: Harold Murphy, VK4HM.

Secretary: Eric Moore, Box 638J, G.P.O., Brisbane.

Meeting Night: First Friday in each month at the Royal Geographical Society Rooms, Ann Street, City.

Divisional Sub-Editor: J. T. Hope, VK4XL, Royal Parade, St. John's Wood, Ashgrove.

QSL Bureau: Inwards—J. Files, VK4JF, Wanda St., Buranda; Outwards—Miss Clair O'Brien, 93 Jardine St., Stafford.

DIVISIONAL NOTES

SOUTH AUSTRALIA

President: G. M. Bowen, VK3XU.
Secretary: H. G. Harris, VK3HN, Box 1234K, G.P.O., Adelaide. Telephone: J 1151.

Meeting Night: Second Tuesday of each month at 17 Waymouth St., Adelaide.

Divisional Sub-Editor: W. W. Parsons, VK3PS, 10 Victoria St., Port Lincoln.

QSL Bureau: Geo Luxton, VK3RX, 8 Brook St., West Mitcham, South Aus. (Inwards and Outwards).

WESTERN AUSTRALIA

President: F. A. T. Tredrea, VK3FT.

Secretary: J. Mead, VK3LJ, Box N1002, G.P.O., Perth.

Meeting Place: Perth Technical College Annex, Mount Bay Road, Perth.

Meeting Night: Third Tuesday of the month. Details—H. R. Biddle, D. E. Graham, VK3HK, 119 Edmiston St., Mt. Hawthorn.

QSL Bureau: Jim Rumble, VK3RU, Box F318, Perth, West. Aus. (Inwards and Outwards).

TASMANIA

President: L. E. Edwards, VK7VLE.

Secretary: W. G. Tait, Box 371B, G.P.O. Hobart.

Meeting Night: First Wednesday of each month at the W.L.A. Club Room, 147 Liverpool Street, Hobart.

Divisional Sub-Editor: L. E. Edwards, VK7VLE, 126 Strickland Ave., Hobart.

QSL Bureau: Ray Calvert, VK7RT, Box 371B, G.P.O., Hobart (Inwards and Outwards).

Zone Correspondents: Northern: Frank Chapman, VK7KA, 26 Trevallyn Rd., Launceston; North Western: R. K. Wilson, 11 Cunningham St., Burnie, Tasmania.

NEW SOUTH WALES

The monthly meeting of the N.S.W. Division was held at Science House, Gloucester Street, Sydney, on Friday, 23rd July, but unfortunately, the attendance was not as good as usual due to the efforts of Council to provide an interesting lecture.

The meeting was opened by the President, Jim Corbin, VK2YC, and after the usual formalities were dispensed with, the meeting opened on the subject of the forthcoming meeting. M. Michael Callard, who gave a most informative and interesting lecture on the "Aqua Lung and Diving." M. Callard gave the technical details of the Aqua Lung and recounted some of his experiences in diving in Australia and also in the Mediterranean and followed the descriptive part of his discourse with some explanatory films which gave a great insight into the work done in France in the perfection of the art. The films depicted the organization of the inspection of the wrecks off Touquin following on World War II, and impressed most of the audience, especially the anglers who were fascinated by the fish, only to be assured that the fish in our waters were both more sizeable and plentiful than in the Medi-

FEDERAL QSL BUREAU

RAY JONES, VK3RJ, MANAGER

Eric Macklin, ex-VK1EM of Macquarie Island a year or two back, will be making the trip to Mawson for the 1955 tour of duty. He will possibly have Hugh Oldham, ex-VK1WO as a colleague.

ZL4JA and ZLAMY expect to be in Australia for a couple of months commencing December. ZL4JA expects that this year will like us so much that he is returning and bringing his pal with him. They plan to move around most of the Eastern States including Tasmania.

VK4IC, Willis Island—275 miles east of Cairns—is heard frequently on 14 Mc. phone, and requests QSLs via W.I.A. as Willis Island gets only one mail per year usually. Just now there are two being carried across two radio and one meteorologist. They are always glad of a call, so don't pass them up although their location doesn't count as a new country.

KCSKU, in a recent QSL to Eric BERSUBS, requests SWL reports on his signals. His address is Jack Youngstrom, Kusiale, Caroline Islands. Jack is active VHF and VK7T. He is also active in amateur radio and VK7T.

He has already contacted all other VK districts. Jack is having his first experience of Amateur Radio while located at the Carolines.

Leo Rand, WZ2AC/MM, aboard S.S. Pioneer Glen, recently in Melbourne, solicits VQ QSOs. He QSLs OK with an excellent card.

Frank Anear, VK3WZ, in a letter under date of June 20th, says it is very difficult with GPO VFO which recently came to hand, and he is more than pleased with the suggestion in a recent "A.R." to substitute a 6L6 as last tube in place of a 6BV. He has been off the air since early May re-building the rig and using the all band final described in October, 1953, "Amateur Radio.

Details of the awards available from the Radio Club of Cuba, and the Radio Club of Costa Rica, are available from this Bureau.

On 11th July, W6AM informed writer that their W4 Amateurs were due to be in HV (Vicksburg) about middle of July. It is not known if they were successful in getting on air from that locale.

W4QCW and W4VZQ were scheduled to arrive at KCA—Navassa Island—on 1st August for five days' operation. It was recently announced that the U.S. Government had withdrawn its support of the project. It is located between Cuba and Haiti and of course is U.S.A. owned. This information also from W6AM.

Enquiries reveal that Jim Carr, ex-VK1JC, has not sent out cards because one of his youngsters had inadvertently burned the log book!

MY XYL SAYS!

WHY is it that if our hobby is purely amateur, quite a number of the boys attempt to carry on a professional conversation when on the air.

My XYL says that if a Ham is in professional radio outside his hobby, he usually tries to hide that fact when he is "Hamming" but some Amateurs, possibly from an inferiority complex, keep introducing a mass of technicalities into the ragchew which at times are the source of much amusement at the other end of the conversation.

Of course my XYL is ignorant of the finer points of Amateur Radio and can be forgiven, if not silenced!

—OIGLE.

territory. This latter disclosure by M. Callaud is possibly responsible in part for the lack of signals on the bands.

Discussion took place on the v.h.f. equipment being constructed by the V.H.F. Group, it being reported that in the near future that the receiving will be completed, the transmitting to be completed in the near future. Finally the meeting was closed and members filled in the remaining time with the familiar ragchew which, as usual, concluded in the street.

SOUTH WESTERN ZONE

News is very scarce this month as even the old stalwarts have missed out on the zone hook-up this last two Wednesday nights. Ray 2APZ has acquired an SC3232 rx so we hope to hear 144 Mc. mobile from Leeton in the very near future. Geoff and Rose at Tumut are hard at work getting 144 Mc. mobile gear going to their satisfaction. Lyn 2AQE has his gear all nicely fitted into a console cabinet; he has visions of moving into the shack and then the things look presentable. Keith Dodd, at Tumut, has the call 2ZAA; congrats Keith and hope the v.h.f. gear gets you lots of contacts.

Arrangements are well in hand for the South Western Zone Field Day on October 1st. It is to be held on 30th-31st October, so all are requested to keep the date well in mind; buy the XYL a new frock, and we hope to meet you all at Tumut on that day.

TOP — 2PA — SATIN (Birchip) and 2ALO (Cooleman) made v.w.e. contact on 144 Mc. on 22/7/54—the Sydney Link now looks good.

HUNTER BRANCH

The July meeting of the Hunter Branch of the N.S.W. Division, W.L.A. was held on Friday, 9th July, at the Tighe Hill Technical College. Lionel Swan, 2CS, presided over the meeting, which was attended by 18 members and associates.

The films were screened, "Battle of the Road," "Are You Safe at Home," and "The History of the Helicopter." Among the correspondence read was a letter of resignation by Harold Smith, who after extensive experiments and trials for the work he had done for the Branch in the past, both in the capacity of a Branch member and also as Secretary.

Max 2OT gave an interesting lecture on "Visual Alignment" and used varied equipment to illustrate and demonstrate the point during the meeting. Max also showed that there is more to aligning a rx than to twiddle the L.I. slug, meanwhile hoping for the best. The lecture provoked much discussion and many were the questions asked at the conclusion.

The Social Committee held a meeting at the residence of Bill 2XT to discuss arrangements for the Hunter Branch Field Day on 3rd October and the Xmas Social to be held in December. The location of the Field Day is not as yet decided, but the suggestion of the site for Blackhall's Park has yet to be confirmed. Definite details of both functions will be found in these notes in next month's "A.R."

The news of the doings of the Hunter Branch boy is not too plentiful this month for two reasons, one that there has been a noticeable falling off in activity and, secondly, my chief v.v.f. and collaborator, Ron 2ASJ, has been holidaying at Denmark. Ron has supplied me with a few details of what each month so will have to see what I can do on my own. Bill 2XT has made many improvements to his TA12 and the signal that he is putting out on 20 m is sending 2XK into the air. He is using two modulations in an endeavour to beat the best of the pair. Les 2AOH has his ATS working OK but is re-building the modulator. Lionel 2CS is still repairing his rig; when he is back he will be in touch again. Doug 2QB has discontinued his 2 mxx gear and is concentrating on 7 Mc. Fred 2AGY still working Adrian 2HE on 2 mxx. Charlie 2ARV is on his annual holidays and brought along some information on Wynn's way.

Doug 2ASJ at Tumutwood is now working three bands using a gamma match. Bert 2AO at the Entrance has his new 20 m beam skywards so listen out for him. The Hunter Branch quickly Met is still operating Monday evenings at 8.30 p.m. on 7140 Kc. with 2AWX as the control station. All Hunter Branch members are invited to join in the net for a ragchew.

The Annual General Meeting of the Hunter Branch will be held at Tighe Hill Technical College on 10th September at 8 p.m.

NORTH COAST AND TABLELANDS ZONE

Once again the effect of government flooding has been seen and for a while things looked very black indeed, but all concerned were relieved when the position eased and it became possible for normality to be reached. Crief reported to have left his home but as far as he is concerned, nothing has since been heard. Ted 2AVG also on the job and was all geared up to work mobile if need be. There is no news from further North, so it appears that all is OK.

Alap 2FH has been holidaying at Port Macquarie and a convention was arranged, which was attended by 2AVG, 2PA and 2PH, your zone officer being tied up with sickness in the family. Peter 2PA getting around on 29 mxx, here he is calling him self consistently. Tony 2AJB has been listening to his own transmission declared it much better than he had thought, so we may hear more of him on the band these days. Web 2AQI is having regular skips with the Inventor group on 144 Mc. where of course they have been quite deaf to us est shown in the band since 2ATD arrived. Bill 2AEY has been building new band-switched final with 813 for use on 80 through 16 mxx. Crief reported to have the GPO in charge of the elusive minx said counter being a home constructed job. Noel 2AHW now has 162 countries confirmed. 2PA working plenty Europeans 6-4 a.m. More and more notes are received from the zone, so see what can be done shape for next month and don't forget Urunga next Easter.

WESTERN SUBURBS

Barry 2AAE is back on the air again, but not so soon after the last break, must be reason. 2YI has a beam and at the time of writing it is 16 ft. above ground, but will soon be around the 31 ft. mark; it is doing well though and puts Harry back in there with the DX and another 2040. We will be keeping the DX over as in days of yore. Alex from the same locality, is the proud owner of a new buggy, he can't decide whether the car or the AR85 take the pride of place. 2HU heard 2AD and thought he was having some fun discussing on "Fifi Rice." Jack 2AKR is still in the game and will be there when the band opens again.

Leo 2KS heard on the "man's" band occasionally, wonder why? 2AGT not heard so often, but is another who will be on when things come along. 2YI will be on when his holidays come to support the beam. 2AFT has been on holidays, has counted his apples and pears, but the trophies, his; has other hobbies including one with a "ong" in it, but still anything is likely to happen to him on the air. The beam is a likely chance for him and he must be about No. 1 man towards W these days.

2AEK and 2NJ are happy with tape recorders, too busy to talk these nights except on records. 2IV starts quite a time away from the 2040 band, but with the beam nice work. John 2ABO and Alf 2AD are heard now and then the signal is quite O.K. but the antenna will no doubt be improved. 2ACD still getting the beam up, but is working on gear for 80 for the R.C. Convention. All you fellows in this area should be in it this year; we need the logs, so don't forget.

2AOH is rarely heard and 2AII has given up, giving away his beam. 2AII is still active when student permits beam near the ground and uses a vertical with which he manages a few contacts. Charlie 2AQW is busy with Council affairs, but goes on 40 now and then. 2QX and 2AOH Blighton has unfortunately met with a car accident is making gradually and spends some of the time on the air talking to his friend, Laury 2AKV at Kurrajong Heights. Ferginal heard from the Parramatta area, but will keep in touch with him. 2AD is most consistent is 2ID who really packs a signal is adding a 2 el on 21 Mc. up top. Ken 2AXZ is a very busy boy with the Class, which reminds us if any you classmate to learn Radio get in touch with Ken Kimberley, address at his home address, it's in the new Call Book, or on the Class nights at the Railway Institute.

NOTE—Will members of all zones please ensure that all letters and notes for these columns are sent direct to 145 Loudon Street, Five Dock, by the 1st of the month. Notes requested by our colleagues in VK3 that they must be in their hands to ensure publication in the issue for which they are intended. It is a matter of respect to me and the zone editor that portions of other names are not represented in the notes, so would be pleased if some of you fellows, both in these areas and others in the suburbs, would do the right thing and drop me a line with your classmate.

If any zone officers have forthcoming functions they feel they would like reported, I would appreciate it if they would notify me so that I can arrange with the Editor before hand—2ACD.

EASTERN SUBURBS

Compiling notes in this area is something like searching for the proverbial needle. Nobody volunteers to "go on" so needs must use the services of the zone and dist. keep the news coming. Even at that the evenings are oftentimes devoid of local activity, and as for daytime and lunch period activity—well, I don't know, being one of those who talk little. Firstly, the main point of importance is word of the new 2KZ to 2KA for the excellent effort in the Call Book. Twas sorely needed. Now one no longer wonders where that bloke is although amendment is

already necessary. The Amateur population does not seem to stay put; especially the younger generation.

2ATA has been very active on 20 mpx phone of late and Phil seems to be getting among the DX, albeit antenna conditions are a bit of a problem, (2KZ with 2KZ) and even a few (quite Beauteous rhombic). Horrie 2FA says that 2ATA has gone to Lord Howe Island for a couple of months so perhaps he will be heard from there via 2KZ? Horrie, at the time of writing, is recovering from hospitalisation and is slowly recovering from his occasional QSO with what DX is offering, to say nothing of that which isn't on the dial—until he calls again to 2FA.

No names, no packdrill. Heard a local say he wouldn't put in one of these new-fangled ideas—a Faraday screen—in order to cut down radio-interference. Quoth Ned, "What's my Brother, we use Faraday screens in rx's and tx's when some of us had our tube filaments lit by pestiferous electric eels?" QST—"Radio" and the Handbooks of two decades ago were written with care about it.

Heard Ray 2AIG saying on the box that he is now using an 813 in the 2ASE as was heard calling 2AA on c.w. on 40 mxx, which could be a first appearance for some time, but there is reason to believe that Eric is active, but on 2 mxx. Still about the same DX as before which have not been heard at least by this writer, are 2AQH, 2AHJ and 2ZQ. 2HP was heard on 40 mxx with a second op. doing the talking. The 2HP is continuing good. Harold 2NA is very much a hamartian active, he keeps 20 and 40 mxx gear peaked for him when can push the switch. Most of his time has been taken up by paint brushes—house kind—not art gallery. A very heard from his station at times. Don 2ZLOR who now lives about the skylanes on 2DBB and when at home puts in Amateur time on 40, 20 and 15 mxx. The antenna situation at 2NO is not at present problems and is reduced to a lone wire, 134 ft. end-fed.

A recent station appearing briefly was 2ZAN, operated specially on the Services stand at Sydney's Royal Show, by Lieut. Commander Tom. 2ZAN. Unless we are in error another VK3 will call in the offing, same day as it looks as if the Amateur bug has bitten. It will be a change from teleprinters anyway. OM, 2ABJ has been busy with line work, but has had a short spell off due to earthling one side of his co-axial feedline the trouble was immediately cured. He is planning a negative peak clipper. 2TN often talks by radio to the Waverley Club, which is slap next door. Say Ivan, what about some string and a couple of tin cans?

VICTORIA

The "Grouch Night" was very poorly attended, only about 50 being present, including 2AYE. Of the hundred or more absences, none sent an apology. Membership increased considerably, Messrs. Bourke, Bowyer and Cunningham are now members. We are awaiting news from Mayle, de Salley, Hawthorn, Higgins, Jansen, Kinsley, Brown-Parker, Wilson and Wolf are Associates. If the spelling of any name is incorrect, my apologies.

Comments on the amateur bands are still operating in the Amateur bands and 2ZA, 2MC and 2ARV are logging these stations and will report instances with the view to having the trouble cleared. I wish them luck.

I am anticipating that, in the near future, arrangements will be finalised to have photographs in "A.R.", each Division supplying the photo in turn.

The Slow Morse Transmission is now made on 3550 Kc., so you chaps who use this service, look forward to the dial.

The Division has recorded their thanks to Ken Millbourne for the presentation of an audio oscillator for the code class.

In the near future, the S.W.I. Group should be formed. Members of this Group will be given official receiving station numbers.

Steps are being taken to start a new award—Worked All Australian Stations on all h.f. bands, i.e. 80, 40, 20, 15, 10 or 11, and 6 mxx. Can't see many stations in the 10 mxx band. Space does not permit a full explanation at present.

Amongst the grouchies were b.e. harmonics, c.w. abbreviations from phone stations, key clicks and the use of the word "Ham." 3TX objects to the use of the c.w. expessions, but I still want to use them in the c.w. section of the news. About the key clicks, well I wouldn't like to say but there is a couple of bobby-dazzlers in this neighbourhood. The word "Ham" is disliked by the Society, President, Secretary and Treasurer of the Society, and the abolition of this awful word. So far I've recruited only two members. Thanks for assistance Max 3ZS. I'll collect your dues later.

Somebody asked an embarrassing question about the C.E.D.N. Apart from the Fox Hunt, there is apparently no activity. I think it was the same fellow who asked about being done about the Olympic Games Committee. The bucks were passed to Council.

Have a note made at the meeting which reads: "Librarian looking for Mugs. Expect this sheet ready May." Anyhow, if you have any material relating to the Institute, please return them pronto.

The Central Western Zone Convention will be held at Reid's Lookout on the Grampians on 10th October. An invitation is issued to all to be present. The State Convention will be held on 27th and 28th November at Ballarat. We'll be seeing you.

The member who missed the July Tx Hunt missed a treat. Mr and Mrs. SLM went to town and if the idea was to toss 3VZ and 3IE, they certainly succeeded. Len borrowed a car from someone and set the gear up in the boot there. The contestants were from the west coast 200 yards across the Marlbrough River, along the river for another 100 yards and then back again. Len provided a ferry service—3d. per person per trip—for those hunters wishing to cross the river. For those drivers you couldn't move without falling over co-ax, batteries or spectators. Even had a boy in a tree and a ladder for those who wished to check the contestants there. SLM was in first, followed by ADU and just five seconds behind. The 3VZ-3IE combine was third with three minutes to go. Reg. Bowen made it just before closing time. Others still haven't found the gosh-darn thing. Phil came after our afternoon tea with a burst of c.w. on our air.

Don't see any point in advertising the Dinner to be held on 12th November. 3ZS is doing very well. He even talked me into it.

After reading the VK5 notes last month, which I do every week, I decided to contact my s.p.s. VXYZ-E/Ts and nabbed a copy of the "Advertiser" dated 8/7/54, just to see what SPS did write each week. Well I hunted through and didn't find a thing. What did, however, catch my eye was a short class of news items in the products of Messrs. Hickson. This picture was framed with an article labelled Wires Institute of Australia. The page was headed the Marion March Page. Now look here Pansy, or was it the Marion March? I mean, I think some sound better. we of the Magazine Committee are sorry, but we cannot devote space to your recipes or household hints. Nor for that matter would Doc be pleased if we printed your report. "SM'D" was wearing a duck-egg blue shirt and a pink bow tie." No sorry, but definitely no fashion notes either. Now wriggle out of that! Oh, how apt, after the snappy classes.

Last month I sermonised on the lack of young blood coming into the Institute and hinted that there was more to follow. Well by deleting a few VK5 notes, I might be able to squeeze this in. A group of tums are on their way for a local Youth Club. We took along practically every piece of equipment we could carry and gave them a night and a half. We have a letter in a dainty feminine hand to prove it. You're truly welcome. I am sure it's a dandy place to go. SARC had some fancy piece of duck-shaving. Anyhow, we wanted his rx. The other participants were 3RN, 3AAF and 4OM. Come to think of it, we enjoyed ourselves too and also learned a lot if not the occasional lesson and have to do a similar job again. What about a few more groups forming and doing something along the same lines.

NORTH EASTERN ZONE

It is understood that Jim SJK has prepared an article on the modification of Command RX's and TX's for "A.R." That is what the Editor likes to see OM (Definitely Ed.) Hugh SMC has been a bit of a nut on 4m. Rex JUR is still home-based in Benalla and Jack 3PF had his new masts painted, but not up at time of writing. Although no news of Murray's 3PQ, Peter 3AFF, Alan 3JU, Bert 3JC and Syd 3CI who must have been after a change from his extensive and generally successful operations on 2 m.

Chas SAWC is putting up other interests than radio, as noted in local paper, while Doug 3JJ has put up two new 50 ft. masts, before temporarily leaving the Grampians, with help from Ken 3KX. Peter 3AFF, Alan 3JU, Bert 3JC and Syd 3CI who must have been after a change from his extensive and generally successful operations on 2 m.

Wally 3QF is doing a little elementary radio construction as well as looking for some new Associate around Numurkah. Our Associate Vern, in Cobram, reported that he had satisfactory papers on radio theory and regulations in the last A.O.C.P. exam, but the telegraphy will probably require another run in October. "An ill wind blows no one any

good," and the good part of this is that it should encourage Associate Clarry with his studies for that exam.

Even though the freezing cold weather did not encourage Stan 3AGT to join an evening hook-up, it does generally limit the operations of Dex 3EP to the warmer daylight hours and either this or work, usually handicaps Dex 3CO and our hook-ups. Dex 3EP is considering setting up a temporary rig in Yarrawonga. Henry 3HP has been quite active up in Springhurst, however Jack 3AKC has been missed lately and is now based on Howard St. Gordon 3KU. It is understood that Ross 3AL will be connected to AC mains shortly so that will fix part of his power problem. Tom 3TS and George 3GD have been in the elusive category of late, but Lex 3AL is taking an active interest in our activities, if not yet transmitting.

FAR NORTHERN ZONE

Activity in the zone has been mainly maintained by Chas 3TU, 3AAF, Bill 3ADN and Frank 3PC. Chas has been working on his building and re-building gear and adjusting his 30 mx beam. His two mx converter is taking shape and we have heard some signals from the local D.G.C., but it won't be active until the end of the month. Bill has been active on 30 mx for the past few months. Noel 3AUG has not been near his shack since February, however he will be having a few contacts on R.D. day.

John 3SN has been building a shack and putting the finishing touches to his tx. He has been working his copper, Charlie, at Macquarie Island. Ian 3AMZ is very quiet and has not been heard on the bands. John 3KFC, a new comber to the zone, working on 59 m. 3GZ has at long last managed to build a shack and is in the process of installing the gear. He hopes to be active on the bands in time for the R.D. Contest. Harry 3MF is still inactive. We hope he will be up and going and send out a signal in the very near future.

CENTRAL WESTERN ZONE

After much deliberation a date and place has been fixed for the zone Annual Convention. At last year's meeting it was decided to hold the next convention picnic style, by way of a change. So this year we intend holding the Seventh Annual Convention on Sunday, 10th October. Peter 3LJ will be at the Grampian Ranger. In choosing this spot, we hope the v.h.f. boys will not be left out of it during the fun and games.

Reed's Lookout (alt. 2,335 ft.) is an ideal site for a shack and also has open views. There is plenty of room there and has shelter and a fireplace if the elements are against us. Interstate V.H.F. Groups will be notified of the date so we may hope for some good interstate visitors. We will have a general camp and bring v.h.f. gear and also h.f. gear as a Scramble is on the menu. For those wishing to dispose of unwanted gear, there will be a general swap. The afternoon will conclude with the general meeting. An invitation is extended to all other zone members and we hope to see the usual faces plus a lot more new ones. All we ask is that all personnel attending, bring along your gear, as although hot water will be available, but it is rather a mountain air will do you the world of good.

Trev 3ATR is wrangling with his new 2 mx converter and should be well and truly on 2 mx by the time this reaches print. His latest addition to the 30 m. mod. is a 30 ft. and now his only quest is how does one dry out a xtal mike suffering from that humidity complex? Herb 3HN has his 2 mx tx working, but is not real happy with same due to the final 718s causing him trouble. He is not experiencing the same trouble except the rig is one of those big new commercial jobs, hi, Bill! Quite a few of us Central Westerners were fortunate in the draw and round off. New 3ACN, Merv 3AO, Herb 3HN and Bob 3ARM are the lucky ones. Charlie VKIAC is still holding up remarkably well on the zone hook-ups, but it seems that very shortly conditions may prevent Charlie from participating in the zone hook-up.

See you next Wednesday night, 50 m., at 1930 hours.

SOUTH AUSTRALIA

In view of the fact that a certain person from across the border is stealing my thunder, I will open the notes this month by announcing that the general meeting of the most progressive DX'ers in the country (that's right, what are you going to say the premier Division, didn't you) for July took the form of a buy and sell night, or as they say in this city of virtue, a tender night. As a result of many misguided readers from over the border, I am sure that you have to be so careful on this matter because in this city of churches, no one can buy or sell

in public without a license from the Government. A very representative gathering of members filled the club rooms. I hesitate to give numbers because numbers can be made to lie, but at a guess I would say there were 125 present, in fact one more than at the last VK3 meeting, if the notes from that small Division can be accepted as factual.

The two gentlemen in charge of proceedings, Douglas 3BY and Fred 3LW kicked off the tender in a somewhat subdued manner, for them and it took me some time to wake up that there was a YL (Miss Smith) in the audience. As a matter of fact, I did not have a suspicion until Ross 3AL, who is a old-timer (12 years), a member of the audience, asked what it was good for and what he could do with it. Ross replied in an extremely gentlemanly manner and went at great length to explain, an action quite unusual for a bushy biker like Ross. About an hour later, Ross asked for the old bottle back and offered to tell the member just what he could do with it, accompanied with actions, and then I knew that the YL had left.

As is always the thing we had by far too much fun, the dinner in one hall and a number of chaps had to take their gear home. This is one of the unfortunate happenings at all of these types of evenings, either there is too much beer or there is too little. Old-timer Bobby Bruce sent along a bush bag for disposal and generously told us to pay the proceeds into the Divisional funds, a gesture that was appreciated by Council and members.

The R.D. Contest was held on the late of 12 p.m. and proved once again how successful these nights have become and between you and me, just how much rubbish in your shack can become a real bargain to someone else. Try it and see for yourself, one day.

It's a regular thing but the Prophet is always without honour in his own country. I quote this truth because it has been forcibly brought home to me that no matter how many pearls of wisdom, how many funny ha-ha's, how much plain talk or to put it another way, how much beaufiful duffus stories from my pen, nobody ever puts pat on the back and says, "Well written young fellow," or "I certainly got a laugh out of last month's notes, etc. etc. However, let me assure you, writing comes from the border, who evidently holds his pen between his six toes on his left leg, write even one line insultingly addressed to me, then I have to go into hiding for a week because even Cedric, Anderson and Wilbourn in Victoria rush to me and says, "Boy, you've got it bad, that VK3 joker put you back in your box," or "What does it feel like when you get it slapped right back in your lap." Don 3MF has added insult to injury by saying in a sweet syrup voice, "That VK3 chap is writing good stuff these days, isn't he," and I have to say, "Yes, I got quite a laugh out of his notes this month." I then get a look of sympathetic pity on his face, receives nobody and only leaves me holding the bag. To think that I met this joker the last time I was in VK3 and maudlin sentiment caused me to put the guy back in my holster. If you have ever experienced this indignity this month, I never saw a bit of rubbish at Dry Creek until I read his notes, and now everywhere I turn rubbish looks up. Wooh we me. I now have to wear a hat out there in case someone sees me and thinks I'm a joker.

Joe 3JO had a short sojourn from his vacation this month with a touch of conjunctivitis. He is about again and looks OK but was a little put out when I suggested that he should return from looking through the "Bull." He was only trying to help. Club 3SON, our newest recruit to the Council, is handling SWL these days and is taking the job real seriously. I have heard a couple of his broadcasts and can certainly give him a thumbs up. He is doing a good job. The job is not an easy one, and could be made a lot easier if you jokers would pass on to him any bits of information, etc., which he could use in the session. What about it fellows? LU 3T17 is the phone number. (Any thought about Pansy, please pass on to me—Ed.)

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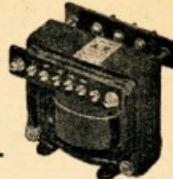
The Hon. Secretary, Max Newell, writes to say that he could not make it last month with the general opinion of being unable to leave his couch of virtue with a bad attack of the "Bull." He tells me that things have been rather quiet the past couple of months due principally to the preparations for the R.D. Contest and the boy scouts, but I expect a lot of action next month when they will be out to win it. The month of August means that the Club is one year old and the first general meeting will be to hand. It is believed that the Club has been in action for one whole year and has succeeded with it must feel proud and well satisfied with its year's work.

The ex-Secretary, Ron Catmusr, has been very quiet since he relinquished the reins of office and quite a number of Amateurs have commented on the fact that they miss his monkey

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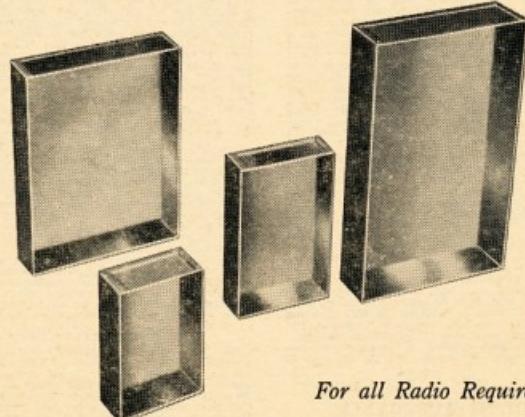
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chatter and hope that he will be back on the air soon. Ted has not really been on the ball lately, and in Club has not been making the last couple of weeks than ever before, which is all to the good as more interest shown by the members in the Club means more good work for its continuance. Ray Farmer is another one who has been fairly active recently. Some rumour has it that it may be for an exterior motive, to wit, the "Farmer Special," which is not a tx or rx but a sleek automobile that is reported to have towed the Ark to the water edge. Ray has the idea of getting a boat in this year for a little mobile experimenting, and it should be a real faithful barge because it has never given him a moment's trouble on the road as yet, mainly because it has not got that far.

Len SOD still remains the most consistent operator of SWC, but he was given leave by the boys to go to the big smoke recently on the pretext of seeing the XYL, but the real reason was to pick up a new beam motor. To think that such a simple affair should cost a desert country. Included in the letter from Max was a QSL card from VK1EG addressed to SPS care of SWC, and now they want to bill me up for yet another subscription! Listen fellows, you have heard of getting blood out of a stone? Well, I am aameen—ansem—ansem—well, anything you haven't got a hope!

I also received a short note from Frank 5MZ who tells me that he is home from the hospital now, but is still feeling the effects of the accident. He is still in a wheelchair, but is improving, and although it looks like being a long job, he finds that listening on the bands has been a great help. The extent of his injuries were right leg broken, both ankles broken, both wrists and knee, several ribs broken on the right side, 32 stitches and plastic surgery on his scalp, left ankle bruised and chipped bone, severa lshock and lacerations, and his left arm affected so much that he can't use his grip and finds it difficult to write for so long. What I can say is that these Bentleys are tough guys and I wish that I had half his spirit. Joe SJO and Charlie SON have been a tower of strength to Frank since his XYL put him in the chair in the hospital and making it possible for him to listen in on the Amateur bands by fixing up his rx after it had gone on the blink. There you have it, that's the spirit on Frank, and don't forget that he is still in a chair on 40 ms, as yet, he will be listening a good deal.

It is my custom, as soon as I receive the magazine to turn first to the Federal page and read the words of wisdom contained therein. Aside from a "Vive Barber" and a couple of other small insults that have greeted my eyes and ears again, I myself have not been satisfied with literary style and news value submitted by the scribe or scribes concerned. That's quite alright, credit where credit is due. Ho hum. However, and this is a big however, the faith in the radio receiver is a rude shock when my eyes lighted upon the statement in the June copy that television would probably come to the two major cities, Melbourne and Sydney first, or second to that effect. Major cities first, or second to that effect? After reading that overstatement I ran around for days like a bee with a bent sting. Why listeners, were you serious in the remark—you were referring to the two major cities of Highburtonham? Don't tell me I know, urging you on if the truth is only known. Compilation Committee! The Greeks have another name for it and it doesn't start with a C.

The news of the passing of Hal 5AW came as a shock to a great many of the Amateurs throughout VK and the letters and telegrams

of sympathy came from all parts of VK. Unfortunately a number did not put their call signs on the cards, etc., and Mrs. Austin finds it hard to recognize all the names of those who extended the gesture of sympathy to her. Whilst most of them have been sorted out by close friends of Hal, there will naturally be a few who will remain unknown. To these good people may I pass on the grateful thanks of Mrs. Austin, who assures me that the expressions of sympathy did much to help her over a trying and sad period.

UPPER MURRAY AREAS

The July meeting of the Upper Murray gang was held at the domicile of Tom STL and took the form of a discussion around the fire, a good idea on nights like those that we have experienced this last two months. In fact, I think that I will try to make a habit of lighting a fire in the middle of the clubroom at our next meeting. I don't think that anybody will object especially if she shows how to start the fire, use the bits of wood in the fireplace. It was one of the first things that they taught me when I joined the girl guides. I learnt several other tricks as well, but let's keep the Upper Murray notes select and also remember that Mr. Flinck is with us. Three hearty hoots and hoofs.

SCF at long last managed to get on the air and Murray was just nicely set to work with Fred SM when the power went off and stayed off for about seven hours. Perhaps you have heard about Alfred and the spider, or was it Bruce and the ocean. Oh no, I am sorry, of course, it was Canute and the cakes. Anyway Murray will be back on the air again. Or should it be back on EXO and have a period of inactivity due to being a victim of the flu and all hope that Alec is now fit and well again. SBC has been heard on 35 Mc. with a power of 5W, but I believe that it is only this band and a measure of making his own arrangements for his contacts on 144 Mc. Apparently the gang are moving to this band in judging by the call signs heard there lately. S7A is another one with 144 Mc. frequenting 3.5 Mc. and reports hearing SGD, SRR, SAP, SLD and SMA. Tom thinks that this looks good for the coming R.D. Contest, but I can only say "time will tell."

SMA has been heard at odd times on various bands Fred manages to get his share of activity in each month. SKW has little to report and but a little activity on the air concerned with sick bed visiting. Hurst maintains his usual calm and sedate progress along the sea of life. SKW has joined the ranks of the 2.5 Mc. boys, although Hurst is keeping a wary ear on the 2.5 Mc. scene, ready to pounce. Believe it or not a certain Amateur in this area has acquired another motor bike. I am not permitted to release the name of the said Amateur as yet, but the bike will automatically be known as "Battling Salvation II." Shush, not a word to Beasy!

I suppose in every State of the Commonwealth there are the odd one or two Hams who won't have a bar of the W.I.A. and at times go out of their way to rubbish it both on the air and off it. I can understand a genuine youngster who thinks that he has a right against the Institute and won't join up because of it. I understand the feelings of the odd one who at some time or other has had a bit of a dog fight with the W.I.A. and has been a nominal member, and because of this won't join up, but the chap that I can't understand is the one who carries a chip on his shoulder for years against the W.I.A. and when asked why, just launches off into a large scale attack on the Council, the members, etc., all based upon hearsay, or rumour. I heard one of this ilk on the air the other day on 40 mx and he had full details of techniques of rubbishing the W.I.A. He would constantly bring up the lack of formalities were over and done with, he would ask the station for his QTH "because he wanted to check it against the new W.I.A. Call Book as he had found a few numbers mistakes in it, and he wanted an unanswerable case book, not an apology for one!" Wouldn't it? When will these characters grow up? If they would only realize that in trying to rubbish the W.I.A. they are attacking themselves. I don't think for one second that the W.I.A. is a perfect answer to the Radio Amateur's prayer, but this I do know, it is as near perfect as it is possible to get under the set-up in VK, and all those who are trying to keep it as hard as possible would be keeping stamps or pressing butterfly wings for a hobby if it was not for the W.I.A.

SOUTH EAST AREAS

STW has had a quiet month, but if my information is correct he is settling himself nicely set for a flying start in the coming R.D. Contest. SKH is making a Q-Ster for his BC43 and is also making good progress with his new shack. What will we be seeing you again Claude? SFD has been unable to compete for the month, although Jim is also getting ready for the R.D. Contest. SJA should resume to break his self-imposed silence and my only hope for now is that he will return to the air again. SKU is well settled in his new shack and Erg is managing to work on an occasional new one. I suppose that in a couple of months he will have a shack of his own, house of glistening and then radio will be taking back seat. SGD has cleared up all of his little troubles and is ready for all contests. Stuart should be first favorite for the R.D. Contest, going on his past performance. He is finally getting all of his radio gear into its rightful place in his new home and even his XYL is on his side because she has informed Col. that the wire, poles, etc., are cluttering up the yard. How lucky can you be?

In closing these monthly notes for September it is extremely embarrassing for me to keep drawing the gentle reader's attention to the talent that exists in VKS, but did you read

Best Technical Article

Some time back, VK5JD donated £1 for the best technical article received for inclusion in "Amateur Radio," over a period of six months.

It was later decided to extend the period until the 30th June, 1954, to enable a greater number of articles to be eligible for the award.

The Magazine Committee have decided that the prize be jointly awarded for an article by E. Cornelius (VK6EC) on "Amateur Television" and "The Complete Amateur" by T. Athey.

The Victorian Council have made available an additional £1 and both these gentlemen will receive their prizes in the next few weeks.

Our congratulations go to both members on their informative articles.

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the Editorial by our President in last month's magazine? Not bad eh? I didn't think that he had it in him. I asked Gordon if he was related to the clergyman who was walking down the street. He said "Yes". I asked him if he assured me that he was not. Apparently playing the church organ has taught him a thing or two. Nice work Shylock, I lifts my cascock to you.

WESTERN AUSTRALIA

At the July meeting of the Institute, members were entertained by Mal Evans, M.W.R.E., lecturer on "Welding and Electronic Control of Welding". Mal produced quite a few samples of the three main types of welding—metallic arc, inert arc and resistance or "spot" welding, and showed quite a bit of interest in the finer points of the art. The film "Gate way to the Heavens" followed; this covering the development of astronomy from the discovery of the telescope to modern times. Wally Coxon, F.C.C., conducted the quiz on "A Day in the Past", from the "Past"! A few anecdotes of Radio in W.A. in the days of "King Spark". He recalled the objection raised when a license fee of one guinea was proposed for the issue of amateur grants. He said that the reason for that the objection was too successful—although at the time was apparently well founded, as the licensing fee for a commercial ship station was only 5/-!

The Annual Dinner of the Institute and Radio Society of W.A. was held at the "Marelli" in Hay Street on 23rd July. Although attendance was poor compared with previous years, there was still a very good turn-out and we look forward to the next. The Committee had organised a number of quizzes and competitions to keep the evening moving—one of which was to guess the number of coins in a box by the ringer when same was shaken. The answer to this was that there would have been a little easier to guess if the box had not been filled with small broken pieces of matchstick!

It appears that the new Federal Contest Committee is "on the ball" this year with their clarification of Rule 5 of the R.D. Contest in regard to operating under another station's call sign for contest purposes. This has been a bone of contention for some time and has caused a certain amount of bad feeling in certain quarters. Good work!

The proposal to provide an emergency network of Amateur Stations on yachts taking part in the annual Fremantle Sailing Yacht Race does not seem to have attracted many—or any takers. The gear is there for the lending, but apparently the gang don't consider themselves to be very good sailors. If you are the sub-committee who can supply details

Well, the R.D. Contest has come and gone for another year, although of course as I write these notes there is still some few days to go before the results are officially known. We hope that VK6 has carried the day again, and if not it certainly won't be through want of trying! But I'm not going to resort to crystal ball stuff at this stage. May the best State win!

As far as his final record of service in the A.M.B. is concerned, I am sure he will be mentioned, although somewhat belatedly, in the mention of Jack Hoare, GOR, in this year's Birthday Honours List. Jack was awarded an M.B.E. for his fine record of service in the A.M.B. Communications.

GAP has been giving the locals a check on their 7 Mc. transmissions per the medium of a tape recorder. It certainly helps in audio adjustments when no receiver is available. One of the inactive types, Ted 6TP, has a good job of the Dinner Committee with 6GM. At present he is working on a new tx so the call may come out for an airing shortly. 6RJ has been stoking up the 14 Mc. end on the 14 Mc. the tune of RST 889 from DUTSWN, not too bad for a 6RJ. Jim vows he is going to disconnect TWI's end of their common 40 mx two half wave bands for the R.D. to release losses. Something unusual in the way was an antenna job he strung from one station's tower to the other, across the intervening neighbour's yard with a phasing stub in the centre. Separate sets of feeders each ended directly to the use of the antenna when he desired. I don't know what would happen if both used the thing together! 6HR, of "Poles and Holes" fame has been with the majority of VK6s—inactive of late, but I hope you gave that beam an airing on the 14th!

6RK confounded the experts by coming on 80 mc c.w. with a colossal signal. Knocked off a ZL or two in fine style then disappeared. What was it? According to QSLs, QSOs and Ringers, I believe the Bunbury boys—6GJ and 6FD to wit—have put a 2.5 mx link into operation. Things may be right here for a spot of DX. What about it? GBS, of Manneringham, has power supply problems with the best of them. A 32v. lighting plant with generators,

220v. home generated DC and 220v. at 400 cycles AC are all called on to power the rig. But in spite of these limitations Bassa manages 90 or so watts on most bands. I believe the view from the top of the hill is excellent and he can see up landmarks 40 miles away, so maybe that's some compensation. Another with what could be a sticky power problem is EMO, of Watheroo. Alan has been having trouble with his 160 Mc. transmitter, the authority at the Masters Observatory did not supply rotary inverters. Associate Wally, EZAA, has his rx converted for 144 Mc. and has received signals, but the tx has been giving trouble. That job is crystal clear, and under way there. Well that's the end of it for another month. Still haven't received any gen from anybody for insertion, so apparently nothing happens here in the West.

TASMANIA

The July meeting, which was held at the Club Rooms, was one of the best attended for many months. There were 20 members present, a number of faces which had been in hiding for some time were shining brightly in the back row—not that Dave, NICE, nice to see you at meetings again Dave. I don't think there is much doubt that the members' enthusiasm generally are due mainly to the excellent lectures that are being arranged by the lecture committee.

On this occasion an illustrated talk was given by Mr. George Hale, of the Tasmanian Museum and Art Gallery, on the detection of the presence of radio-active minerals by Geiger counters. Mr. Hale proved himself to be thoroughly conversant with his subject and it was not until 10 p.m. that the questions were finished and the various exhibits appreciated. Actually, I have my own theories on this mineral detection business. Since the Gamma rays given off are electromagnetic radiations, they could be detected by a receiving aerial in the ordinary manner. The line-up may be as follows. The Gamma rays would be mixed in the first converter with x-rays where they would be converted to light rays. The 1st. channel would consist of a telescope and 2nd detector, the human eye, and would therefore only be necessary to place the 1st. channel to the eye to detect the radio-active minerals buried underground!

Of course, some chap may wish to go one better by using direct conversion. In the 2nd mixer the light rays may be converted to radio waves by mixing with infra-red rays and by using the ordinary Amateur rx to detect the radio waves in the normal manner. The source of infra-red rays may be from a burning hot, as a hot water bottle, Indian curry or one of TML's jokes, but now I'm getting facetious. I intend to try out this gadget on the property of T.F.Y. as I expect hearing the same noise that comes from the very early Geiger counter on his ARS. You know there's something in this scientific business.

The August meeting was held at the University Library Room, Sandy Bay and after a brief half hour of business, the meeting was addressed by T.K.M. Ken McCracken who deputised for Dr. A. G. Fenton, of the Cosmic Ray Laboratory. Dr. Fenton was unfortunately not able to attend. Ken made a good job of explaining the whys and whereabouts of cosmic rays. After a brief theoretical treatment of the subject, the gathering moved to the Cottesloe Bay Laboratories nearby, where the practical aspects were examined and explained. The evening was perhaps the most interesting of any so far—it was to me anyway, and I thoroughly enjoyed myself. Supper was served by courtesy of the University.

An attempt will be made to get the new TWI tx and shack completed for the R.D. Contest, and by the time this appears in print, the shack should be a going concern. 7AL and T.F.J. made a sum of money in their position and reported favourably, recommending the "A" series masts on the roof with feeders coming down the light well to the shack.

Group Competition—Sam T.U.W recently on a visit to Hobart from the N.W. Coast—said to you Sam, if only perchance a Phas. Chas TCF also a Hobart visitor from his Queenstown haunt, how did the new Vanguard go on the way home Chas. Ian TCF reported that he had 50 Mc. gear for a small 1/2-w. rx, the sort of hoped for thought the bug might bite again Ian. Keith TRX building the rig into a steel cabinet—why hide all that beautiful work Keith? TAF may now R.I.P. the manhole covers have now been fixed. That's all for now; back to the rathouse.

NORTHERN ZONE

TZB has been heard on again lately now that the house is completed. TZW has been doing some odd jobs for 6RJ and 6KZ, 14 Mc. spots and his new 144 Mc. tx should be about right for his hidden tx jaunts. TZL lately decided on a more elaborate pole to complete his antenna systems and the said pole is now safely aloft braving our winter elements. VPF is seen just in passing these days as building has all

his attention, but a 144 Mc. antenna is pointed mainland-wards, though, from his new QTH. TZQ is still wrestling with crystal converts. TZV has been having trouble with his 144 Mc. for the suns rx was just about ready to go. TZH has been heard once again from the North-West Coast—good to hear you Ted.

7WFM had the police down to Kelso a few weeks ago looking for a missing "long wire" antenna. His work is not done yet, he did not know everything about it, but has his base beam up in a new QTH, right on the waterfront. His mail now, believe it or not, arrives in a private bag! TGM is re-building still, and the new shack is almost finished. TGR, of the TRK, our DX man, has forsaken the key for the key board and plays a merry tune at some of the local balls. As President recently he arrived in dinner suit and we all felt he were at the wrong dress-up, we were disappointed the wearer. One of our Associates, Harry Solomon, has gained a place in the morse code classes at the local Technical College—"so look out ticket here I come!" Les Geddeskirk is waiting for the results of his "Limited" to arrive—he's hoping.

HAMADS

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